Occupational Health and Safety Surveillance in New York State
Occupational Health Indicators
July 1, 2012 – June 30, 2013

Principal Investigator: Kitty Gelberg, Ph.D., MPH (khg01@health.state.ny.us)

Contact Information: Bureau of Occupational Health and Injury Prevention/NYSDOH
Corning Tower, Room 1325
Empire State Plaza
Albany, NY 12237
518-402-7900; Fax: 518-402-7909

BRIEF OVERVIEW OF PROJECT
This project supports general occupational health surveillance activities including the occupational health indicators, the NYS Occupational Health Clinic Network, the Heavy Metals Registry, and special projects.

ACCOMPLISHMENTS AND OUTPUTS

Occupational Health Indicators
• NYSDOH has collected all 19 designated occupational health indicators (OHIs), and has added an additional indicator on hospitalizations for work-related low back disorders through 2010.
• NYSDOH developed how-to guidance and pilot tested an indicator for work-related asthma. This indicator was approved by CSTE for states to include as an optional indicator.
• NYSDOH continues to provide technical assistance for the OHIs involving the use of hospitalization data.
• Staff participate on the OHI County Level Data Analysis sub-workgroup providing advice and input into the development of a how-to guide for county-level indicators.
• Five of the OHIs have been calculated at the county level and provided to the Community Health Indicator Reports to improve community access to occupational health data in a user-friendly environment. These include calculating and mapping rates for three years for:
  o all pneumoconiosis hospitalizations,
  o asbestosis hospitalizations,
  o work-related hospitalizations,
  o malignant mesothelioma, and
  o elevated blood lead levels among adults (>10 mcg/dL).
The three-year rate for each county was compared to the NYS rate for the above listed OHIs along with the:
  o incidence of malignant mesothelioma,
  o elevated blood lead levels for both ≥10 µg/dL and ≥25 µg/dL, and
  o fatal work-related injuries.
• Staff is working to incorporate information from six occupational health indicators into the Environmental Public Health Tracking (EPHT) program at the state level. This includes elevated blood lead levels, both ≥10 mcg/dL and ≥25 mcg/dL, work-related
hospitalizations, pneumoconiosis hospitalizations, asbestosis hospitalizations, fatal occupational injuries, and mesothelioma.

Special Projects
- Staff incorporated a goal of reducing occupational injuries and illnesses into the NYS Prevention Agenda for 2013-2017. The following objectives have been promoted:
  - Increase the number of NYSDOH databases computerizing industry and occupation variables from 3 to 15.
  - Reduce the impact of climate change on outdoor workers.
  - Reduce the rate of occupational injuries treated in emergency departments among working adolescents 16-19 years of age from 1.5 per 100 full-time equivalent workers to 1.35.
  - Reduce the rate of emergency room visits for occupational injuries among adolescents 15-19 years of age from 36.7 to 33.0 per 10,000.
  - Increase the percent of hospitals with comprehensive respiratory protection policies from 39.1% to 54.7%.
  - Increase the percent of health care workers vaccinated for the flu from 75.6% to 90.0%.
  - Increase the percent of workers who come in contact with the public who are vaccinated for the flu.
- Staff continues to collaborate with the NYS Young Workers Safety and Health Project to bring the Passport to Safety to 5000 high school students in NYS. This is an on-line training course about occupational safety and health issues.
- A new Request for Applications was posted for the New York State Occupational Health Clinic Network. Ten contracts were awarded distributed over nine million dollars throughout New York State to aid in the recognition, diagnosis and treatment of occupational diseases.
- An update of the OHCN Report to include data from 2004-2012 has been completed and is undergoing review.
- Staff has developed a report summarizing data from the Heavy Metals Registry for 2006-2010. This is undergoing internal review.
- The Lead on the Job brochure for workers has been rewritten to include more up-to-date information and will be piloted with focus groups.
- Staff has participated in workgroups with the Governor’s Traffic Safety Committee, with the Suicide Prevention Council, and with climate change surveillance programs, exploring areas of collaboration and incorporation of occupational health and safety practices into other arenas.
- The adult blood lead program has worked with the childhood lead program in identifying pregnant women with elevated blood lead levels and informing the local health departments of the case with the due date to ensure the newborn gets their lead level testyes bd and appropriate interventions occur.

POTENTIAL OUTCOMES
Presentations
• An educational conference for health care providers about diagnosing occupational disease was held on September 28th. This conference was developed with the Occupational and Environmental Health Center of Eastern NY and the University of Albany, School of Public Health. CME and CNE credits were available.

Publications

Posters
• ‘Game of Logging for Farmers; New York State FACE Program’ was shown at the 2012 Occupational Health Surveillance Partners Meeting on Dec. 5-6, 2012 in Tampa, Florida.

INTERMEDIATE OUTCOMES
• Information from the OHI was used to influence the 2013-2017 State Prevention Agenda. A goal to reduce occupational injury and illness (I/O) in NYS was developed, which included increasing the number of NYSDOH databases using computerized I/O variables; reducing the impact of climate change on outdoor workers; reducing the rate of occupational injuries among working teens; increasing the percent of hospitals with comprehensive respiratory protection policies; increasing the percent of health care workers vaccinated for the flu; and increasing the percent of workers who come in contact with the public vaccinated for the flu.
• Information regarding the incidence rate of elevated blood lead levels by race/ethnicity was included in the NYS Minority Health Surveillance Report, 2012.
BRIEF OVERVIEW OF PROJECT
The New York State Department of Health (NYSDOH) Fatality Assessment and Control Evaluation (FACE) program investigates work-related fatalities and researches and develops prevention measures to reduce and prevent occupational injuries and fatalities.

ACCOMPLISHMENTS AND OUTPUTS
Staff identified 150 work-related fatalities (July 1, 2013 – June 30, 2013). Since the implementation of the study in 2002, NY FACE identified 1,634 occupational fatality cases.

Investigation Report:
- A Department of Public Works Worker and a Volunteer Firefighter Died in a Sewer Manhole Case Report (10NY060)

Trade Journal Articles:
- “Sewer Manholes Can Kill” published by “Talk of the Towns”, the bi-monthly magazine of the Association of Towns of NYS in the April/May 2013 issue.
- “Construction Falls Kill Workers-What You Can Do to Save Lives” published by “Talk of the Towns” April/May 2013 issue

NY FACE Injury Prevention Updates:
- Worker Memorial Day Observance and Stop Construction Falls Campaign (April issue)
- Latest development in Stop Construction Falls Campaign (June issue)

Newsletter Articles:
- Worker Memorial Da”
- Residential Roofing Fall”
- Prevent Work Related Heat Illnesses
- It’s Almost Summer: Time for Work Zone Safety

Presentations:


Posters:


INTERMEDIATE OUTCOMES

NY FACE’s recommendations were officially adopted by the Precast/Prestressed Concrete Institute (PCI) and incorporated into the 2012 version of the PCI manual “Erection Safety for Precast and Prestressed Concrete”. PCI develops and maintains the standards for designing, fabricating and constructing precast concrete structure for the construction industry. The Manual has been used by the construction industry as a technical and safety standard. OSHA has been using the Manual as a consensus industry standard for enforcement. Based on the recommendations provided by NY FACE in the report 07NY015 (“Construction Laborer Dies after Falling off Collapsed Precast Concrete Floor Slab”), the PCI Erectors Committee wrote an additional section to include bearing conditions, securing panels, bearing shift, preplanning and surveying of bearing conditions. These revisions, if adopted, will reduce the possibility of worker fall injuries due to structural instability.

The monthly column FACEValue of Safety + Health Magazine published by National Safety Council (NSC) featured two NY FACE investigation reports “Master Stonemason Dies in a 30-foot Fall from a Handmade Work Platform Attached to a Powered Industrial Truck (07NY107)” and “Plumber Dies after Trench Wall Collapse (07NY033)”. 

The Program Coordinator and Trainer of L&M Training Center in Syracuse used the NY FACE investigation report “A Department of Public Works Worker and a Volunteer Firefighter Died in a Sewer Manhole (10NY060)” to develop a training curriculum for the Auburn Fire Department. New York Center for Agricultural Medicine and Health (NYCAMH) disseminated the same report to the highway departments and fire companies in central New York.

The Director of Industrial Hygiene Service for the Occupational & Environmental Health Center of Eastern New York incorporated the following NY FACE reports into the training programs for the OSHA 30 hour construction safety and 16 hour Disaster Site Worker Training: A Department of Public Works Worker and a Volunteer Firefighter Died in a Sewer Manhole (Case Report 10NY060), Contractor Crushed against the Cab of Dump Truck by the Dump Body (Case Report 08NY067), Crane Boom Collapse Kills Man during Disassembling (Case Report: 08NY011), Equipment Operator Killed when Pinned to a Tree by an Excavator (Case Report: 06NY010), City Engineer Killed in Landfill Manhole When Retrieving Flow Meter: Case Report: 03NY027.
**Ski Industry Project**

Employees of ski facilities in the U.S. have high injury rates and NYS has the largest number of ski centers in the U.S. NY FACE continued working with Ski Areas of New York, Inc. (SANY), a trade association, to develop injury prevention training materials and provide training.

- Staff coordinated and participated in a presentation and panel discussion titled “*Stay Ahead of Worker Safety*” at the Ski Expo 2012. National Ski Area Association, NYS Department of Labor On-Site Consultation and OSHA participated in the panel discussion. A total of 35 people representing 17 ski resorts in three states (MA, PA and NY) attended the session.
- The director of Risk Management for the National Ski Areas Association contacted NY FACE to request more snowmaking training cards and posters. NSAA has been disseminating the cards and posters at various conferences throughout the country and more ski areas learned of them. Ski areas in Arizona, California, Colorado, Nevada, Vermont and New Hampshire requested for the posters and cards for employee training. One hundred fifty posters and 1,600 training cards were mailed to NSAA.

**Logging/tree-work Injury Prevention Project**

Logging has consistently been one of the most hazardous occupations in the United States. NY FACE developed *Logging Safety: A Field Guide* based on WV FACE model in 2009 and collaborated with many injury prevention partners to disseminate the Guide and provide logging safety training.

- A certified Game of Logging (GOL) instructor, who has taught GOL class for 16 years, requested 300 copies of the Guide. Approximately 800 professional loggers, landscapers, nursery workers, farmers and private property owners attend GOL classes every year. The instructor stated “the guys really liked the booklets.” He considered that the Field Guide can help the trainees understand the training content, and review and practice logging safety after the training better.
- The Health and Safety Manager of the NYS Parks Genesee Region contacted NY FACE to request for more copies of the Field Guide. This manager stated that the workers “love the book”. Every field employee has a copy in his truck. The book is used during toolbox talks and tailgate trainings. The Regional Office also gave the books to students and contractors. Six hundred copies were mailed to the manager who will disseminate them at the NYS Parks Regional Safety Conference in the spring of 2013.
- An employee safety representative and manager of New York State Thruway Authority requested 150 copies of the Field Guide after initially obtaining two copies at the staff Health Fair in Albany. While attending a tree and brush cutting operation in Syracuse on October 24, 2012, he noticed that a new employee was uncertain about the cut he was supposed to make with a chainsaw. The Field Guide was provided to the employee who immediately started reading it. The young employee exclaimed: “Look! This is the cut that I was trying to make! Here are the diagram and instructions too…” He planned on using the Field Guide for the annual safety training for all four Thruway divisions.
Occupational Health and Safety Surveillance and Intervention in New York State
Pesticide Poisoning Surveillance Program
July 1, 2012-June 30, 2013

Principal Investigator: Kitty Gelberg, Ph.D., MPH (khg01@health.state.ny.us)
Bureau of Occupational Health and Injury Prevention / NYSDOH
Corning Tower, Room 1325
Empire State Plaza
Albany, NY 12237
518-402-7900; Fax: 518-402-7909

Project Director: Karen R. Cummings, MPH (krc01@health.state.ny.us)

BRIEF OVERVIEW OF PROJECT
The New York State Department of Health (NYSDOH) Pesticide Poisoning Registry (PPR) was established in 1990 and requires a) physicians and health facilities to report suspected or confirmed pesticide poisonings, and b) clinical laboratories to report depressed cholinesterase results, indicative of some pesticide exposures, within 48 hours. Intervention is structured around individual reports. These may indicate an unanticipated hazard of a new product or the first report of a cluster of cases. The interview is an opportunity to discuss the hazards of pesticides, and ways to reduce or eliminate exposure through Integrated Pest Management (IPM), product substitution or use of protective equipment. In cases of occupational exposures or clusters, an industrial hygiene consultation is available.

ACCOMPLISHMENTS AND OUTPUTS
From July 1, 2012 to June 30, 2013, staff reviewed 1,147 reports of suspected pesticide poisoning. Of those, 292 cases met NIOSH’s definition of definite, probably, possible and suspicious. This data is used internally to identify trends in acute pesticide poisonings and emerging pesticide hazards and guide education and outreach efforts for pesticide poisoning prevention. Outside partners use this data in their program functions. The 2011-2012 Sensor Pesticide Incident Data Entry and Reporting (SPIDER) data was submitted to NIOSH. This data is aggregated with data from other SENSOR states for use in their research.

Public inquires for information regarding the health effects associated with exposure to certain pesticides and products continue to be received. PPR staff provides requested information or makes appropriate referrals to other NYSDOH Bureaus and other State Agencies that are able to respond to the needs of a call or email inquiry.

Data Partnerships
- Our partnership with the NYSDOH Bureau of Toxic Substance Assessment has provided us with continued access to FIFRA 6 (a)(2) reports. Pesticide product registrants are required to report information concerning adverse health effect to the USEPA. The reports are subsequently shared with the NYS Department of Environmental Conservation and NYSDOH.
- A partnership with the NYS Workers Compensation Board (WCB) has allowed us access to workers' compensation claims system called eCase. eCase is the WCB electronics case folder for all people who have submitted a WC claim and includes scanned images of all documents related to their case. This is a resource for additional information on cases but not a means to ascertain new cases. We continue to work closely with the WCB on a mechanism to use WC claim data as a means to identify new cases.

- Strengthened partnerships with the two Poison Control Centers in New York - the Upstate New York Poison Control Center and the New York City Regional Poison Control Center - has allowed for a substantial increase in cases reported to the PPR. The timely cooperation of the Poison Control Centers has been a major asset in the identification of pesticide poisonings in New York State.

Potential Outcomes

- Data on adverse health effects from disinfectants used to control mold was provided to the NYSDOH Bureau of Toxic Substance Assessment. Certification is not currently required for the application of disinfectants, and the impact of this lack of certification was under-review.

- NYS Department of Environmental Conservation was provided information on work-relatedness and activity at time of exposure of pesticide poisoning reports for federal fiscal year 10/1/2011-9/30/2012. The data was included in an annual report to Region 2’s US Environmental Protection Agency (EPA) Office of Pesticide Programs. The USEPA Office of Pesticide Programs collects pesticide exposure and incident data from a variety of sources including the States and may use it in pesticide related reports and decision making.

- De-identified pesticide poisoning data was provided to two students with the University of Medicine and Dentistry of New Jersey for use during their internships at the USEPA.

- Information on the recognition, diagnosis, and reporting of a pesticide poisoning was provided to 265 emergency room departments in hospitals across New York State. The mailing contained a reminder notification packet that included state reporting requirements, HIPAA compliance information, information on the PPR and resources available to diagnose and treat suspected or confirmed pesticide poisoning.

- Outreach material was provided to Center for Environmental Health staff that attended various fairs and community events. For example, refrigerator magnets containing information on proper laundering following pesticide applications, as well as comic books were provided to the parishioners at a Spanish Mass.

Publications


Newsletter Articles

- “Diagnosis of Occupational Diseases” published on the New York County Medical Society website. The society is a professional membership organization with over 2,000 members.
- “Pesticide Poisoning: A Reportable Disease in New York State” published in the March/April 2013 Member Update newsletter of The County Medical Societies of Broome, Delaware, Otsego and Tompkins Counties.

Impacts

- Collaboration with the New York Center for Agricultural Medicine and Health (NYCAMH) provided respiratory protection training, medical clearance, and fit testing to farm workers and farm owners, in both English and Spanish. There were 93 farmworkers and farm owners trained on proper respirator protection, and 59 were professionally fit tested either at their farm or the local farm worker community center. Appropriate personal protective equipment (PPE) is a component of the Worker Protection Standard. Respirator masks and other PPE, including gloves, goggles, boots, etc., can protect against hazards, including pesticide exposure, and significantly reduce the risk of illness or injury.
- Guidance was provided to a physician on cholinesterase monitoring procedures following the report of three volunteers who were applying pesticides at the organization where they volunteered. The volunteers were not certified pest control operators and ceased doing pesticide applications at the organization.
- Information provided by a physician at the Occupational and Environmental Medicine of Long Island clinic identified a cluster of individuals referred to him for health outcomes associated with pesticide exposure from Hurricane Sandy. All patients had a similar pattern of laboratory results including depressed plasma cholinesterase tests. The physician quickly ruled out pesticide poisoning and identified the common source of exposure was a dietary supplement prescribed by the same alternative practitioner who referred the patients to the doctor. Working the US Food and Drug Administration and the NYSDOH Wadsworth Laboratories on the on-going investigation into these cases has led to the discovery of the steroid contamination of these dietary supplements. The reporting of the depressed cholinesterase tests allowed for identification of potential additional cases.
BRIEF OVERVIEW OF PROJECT

The New York State Department of Health (NYSDOH), Bureau of Occupational Health and Injury Prevention’s (BOHIP) Occupational Lung Disease Registry conducts surveillance of work-related lung disease, including work-related asthma, through state mandated reporting. Under the reporting regulations, physicians, health facilities and clinical laboratories are required to report any patient with clinical evidence of occupational lung disease. Emergency department data and hospital discharge data are used to identify potential cases seen in hospitals. The NYSDOH also partners with other NYSDOH programs and State Agencies to identify work-related asthma cases. The program analyzes the data from the Occupational Lung Disease Registry and population-based data from the Behavioral Risk Factor Surveillance System Asthma Call Back Survey to characterize work-related asthma in New York State. The program conducts worker and company follow-up and provides intervention services to help prevent ongoing or future exposures, and to protect other persons who may be at risk.

ACCOMPLISHMENTS AND OUTPUTS

Data Partnerships
- A partnership with the NYS Workers Compensation Board (WCB) has allowed us access to workers' compensation claims system called eCase. eCase is the WCB electronics case folder for all people who have submitted a WC claim and includes scanned images of all documents related to their case. This is a resource for additional information on cases but not a means to ascertain new cases. We continue to work closely with the WCB on a mechanism to use WC claim data as a means to identify new cases.
- A collaborative effort with the NYS Occupational Health Clinic Network permits real-time reporting of patients seen throughout the network through the Occupational Health Network Information System (a web-based data entry program). Information about this system was provided to NIOSH for use in a work-related asthma surveillance how-to-guide.

Potential Outcomes
- Data on 143 work-related asthma cases from 2009 was submitted to NIOSH. This data is aggregated with data from the other four states (California, Massachusetts, Michigan and
New Jersey) conducting work-related asthma surveillance for use in NIOSH’s research and for publication in the eWoRLD tables.

- Over the past 12 months, there have been over 2,000 copies of the “Is Your Asthma Work-related?” brochure distributed through the NYSDOH Distribution Center. The distribution center responds to requests from individuals, as well as organizations, interested in utilizing our information in their work-related asthma prevention efforts. The brochure is available on the NYSDOH web site, as well. [http://www.health.ny.gov/publications/2775.pdf](http://www.health.ny.gov/publications/2775.pdf)
- The work-related asthma brochure “Is Your Asthma Work-related?” was translated into Spanish and made available through the NYSDOH distribution center, as well as on the NYSDOH web site. [http://www.health.ny.gov/publications/2832.pdf](http://www.health.ny.gov/publications/2832.pdf)
- Through a partnership with the NYSDOH Asbestos Safety Training Program, educational materials on work-related asthma, as well as smoking cessation, were provided to approximately 1,000 workers who received training for asbestos abatement. These workers included those conducting asbestos abatement, along with workers in fields such as construction, plumbing and maintenance.
- Through a partnership with the NY Department of State, Division of Licensing Services, the NYSDOH Health alerts on hair straightening products and formaldehyde have been distributed to cosmetologists when they renew their cosmetology license. In NYS, cosmetology licenses must be renewed every 2 years. Over 100,000 cosmetologists have received the health alert. The health alert is also available on both the NYSDOH and the NY Department of State web sites. [http://www.health.ny.gov/environmental/chemicals/formaldehyde/docs/worker.pdf](http://www.health.ny.gov/environmental/chemicals/formaldehyde/docs/worker.pdf)
- A survey on cleaning products and asthma was distributed to bed and breakfasts located throughout NYS. The aim of the survey was to learn about cleaning product use and to determine interest in educational materials on work-related asthma and cleaning products. There was some interest by the recipients for more information on the topic.
- Information about reporting occupational lung disease cases, including work-related asthma, was provided to all hospitals in NYS. The outreach included information on the Occupational Lung Disease Registry, the NYS reporting requirements, the types of cases reportable, and information on HIPAA compliance.
- A new work-related asthma indicator using data from the Asthma Call Back Survey was developed to calculate the ever-employed adults with current asthma who report that their asthma was caused or made worse by exposures at work. The work-related asthma indicator was proposed and unanimously adopted by the Council of State and Territorial Epidemiologists Occupational Health subgroup during the annual meeting in Pasadena, CA in June 2013. The work-related asthma indicator will be added to the Occupational Health Indicators as an optional indicator and will be a valuable resource to States in calculating the potential burden of work-related asthma.

**Newsletter Articles**

- “Diagnosis of Occupational Diseases” was published on the New York County Medical Society website. The society is a professional membership organization with over 2,000 members.
• “Could Your Patient Have Work-Related Asthma” was published on the New York County Medical Society website. The society is a professional membership organization with over 2,000 members.
• “Cleaning Products and Asthma” was published in the Empire Bed and Breakfast Association (ESBBA) member newsletter. ESBBA is a membership organization of bed and breakfasts and inns in NYS that are dedicated to high standards of hospitality and quality.

Presentations
• “Cleaning Products and Asthma: Education and Information for the Hospitality Industry” was presented at the Council of State and Territorial Epidemiologist annual conference held in Pasadena CA in June 2013.
• “Cleaning Products and Work-related Asthma” was presented at the NYS Hospitality and Tourism Board meeting held in Syracuse NY in February 2013. The information was presented to the board in an effort to gain support in the development of education materials on the topic for the hotel industry.

Impacts
• Collaboration with the New York Center for Agricultural Medicine and Health (NYCAMH) provided respiratory protection training, medical clearance, and fit testing to farmworkers and farm owners, in both English and Spanish. There were 93 farmworkers and farm owners trained on proper respirator protection, and 59 were professionally fit tested either at their farm or the local farm worker community center. Appropriate personal protective equipment (PPE) is a component of the Worker Protection Standard. Respirator masks and other PPE, including gloves, goggles, boots, etc., can protect against hazards, including pesticide exposure, and significantly reduce the risk of illness or injury.
• Investigation into a case of work-related asthma that was reported to the Work-related Asthma Program led to the discovery of a fatal case of asthma that occurred in the same establishment. The case was referred to the US Occupational Safety and Health Administration (OSHA) regional office for further investigation.
• NYSDOH has continued to coordinate a response with OSHA, NIOSH and the New York University/Bellevue Occupational and Environmental Medicine Clinic following the death of a US Department of Agriculture Food and Safety Inspector stationed at a chicken processing plant. The inspector was hospitalized following hemoptysis with a history of respiratory illnesses, including asthma. Another employee who was working at the plant who has been out on disability has been identified. One of the chemicals that the inspector was exposed to was peracetic acid used to sanitize the fowl. There have been cases of occupational asthma caused by peracetic acid and long-term exposure to high concentrations can cause permanent lung damage. An OSHA investigation is continuing with assistance from IH staff.